SYSTEM AND METHOD FOR RESOLVING FREQUENCY AND TIMING UNCERTAINTY IN ACCESS TRANSMISSIONS IN A SPREAD SPECTRUM COMMUNICATION SYSTEM

ABSTRACT

A method for reducing the number of required frequency and time hypotheses to acquire an access transmission in a satellite communication system. By reducing the number of required hypotheses, the amount of hardware required to acquire the access transmission is reduced. The method of the present invention reduces the number of required hypotheses by reducing the range of possible frequency and timing values of the access transmission. The range of possible frequency and timing values is reduced by determining the frequency and time uncertainties over individual satellite beams rather than over an entire satellite footprint.